

**Abstract**

An apparatus and method for polling stations that transmit and receive periodic traffic streams are disclosed. The illustrative embodiment determines when to transmit a frame comprising a data payload and a poll to a station based on (i) the temporal period and temporal offset of the traffic stream transmitted by the station, and (ii) the temporal period and temporal offset of the traffic stream received by the station, such that delays for either the transmitted traffic stream or the received traffic stream are reduced. The present invention is particularly advantageous for latency-sensitive applications such as voice and video telecommunications.